

(No Model.)

A. H. WIRZ.
BOTTLE STOPPER.

No. 302,698.

Patented July 29, 1884.

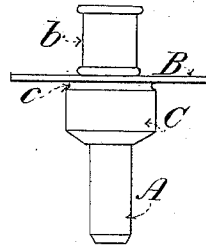


Fig. 1

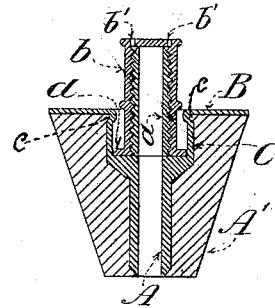


Fig. 2

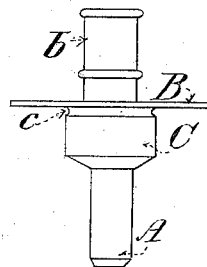


Fig. 3

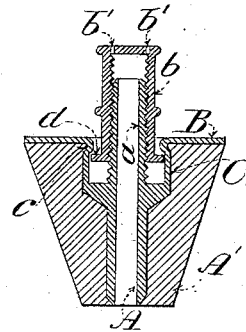


Fig. 4

WITNESSES:

Solom & Belsterling
Samuel S. Hing

INVENTOR

August H. Wirz
by his atty
Thomas D. Mowbray

UNITED STATES PATENT OFFICE.

AUGUST H. WIRZ, OF PHILADELPHIA, PENNSYLVANIA.

BOTTLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 302,698, dated July 29, 1884.

Application filed April 23, 1884. (No model.)

To all whom it may concern:

Be it known that I, AUGUST H. WIRZ, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Bottle-Stoppers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to bottle-stoppers, and comprehends more particularly improvements of certain features of the stopper for which I filed an application for Letters Patent on October 15, 1883, Serial No. 108,983, and which application was duly allowed December 8, 1883, and final fee paid March 6, 1884.

In the accompanying drawings, Figure 1 is an elevation of a closed stopper. Fig. 2 is a section through Fig. 1. Fig. 3 is an elevation of a stopper open. Fig. 4 is a section through Fig. 3.

A represents the body of the stopper; *a*, the neck or outlet thereof.

A' is the cork into which the stopper is fitted for adjustment into the bottle-neck.

C is a cylindrical trough-shaped collar surrounding the neck or outlet *a*. This collar, together with the flange or disk B and body A, are formed of one piece of metal, or, if desired, may be made of separate pieces and suitably joined together. The disk B extends out and covers the top of the cork.

b is a screw-cap fitting over the neck *a*.

b' *b'* are ports or openings in the top of the cap *b*, through which the fluid passes out after leaving the neck of the stopper. There may be any desired number of these openings, and they are located just outside of that portion of the cap that fits down on the top of the neck *a*. (See Figs. 2 and 4.)

d is a flange surrounding the bottom of the screw-cap *b*.

e is an inwardly-extending circular crease or depression formed in the collar C immediately under flange or disk B. This crease or depression, operating upon the flange *d* on the cap, forms a stop for said cap, thus preventing its removal, while allowing it to move freely

up and down. The valve of the stopper is formed by the inner part of the top of the cap *b* fitting down on the top of the neck *a*, as shown in Fig. 2. The valve is opened by unscrewing the cap. (See Fig. 4.) If desired, this cap may be fitted on the under side thereof with a leather washer, thus forming a more secure valve. The trough-shaped collar C forms a convenient receptacle for receiving and holding any drip that may flow from the neck of the stopper after having been used, thus preserving the bottle and label, &c., from being soiled. By placing the circular crease or depression in the collar C, instead of in the cap, I am enabled to make a stopper having an outlet or outlets that will freely discharge all the liquid that will pass through the neck thereof, thus adapting it for use in bottles containing liquids of any consistency or those containing powders. The chamber or trough C lies beneath the upper surface of the cork, whereby I am enabled to form a very compact and close-fitting stopper when the neck *b* is screwed down. It also enables me to form the crease *e* at the very point where the walls of the trough C and the inner edge of the disk B join, thereby saving an extra crimp or bend of the metal, and making a neat, strong, and efficient top for the stopper.

Having thus described my invention, what I claim is—

A bottle-stopper having the threaded neck *a* and screw-cap *b*, provided with outlet or outlets *b'* and flange *d*, in combination with the cylindrical collar C, said collar lying beneath the upper surface of the cork, and formed integral with or united to the body of the stopper surrounding the neck thereof, so as to form an annular trough or receptacle, and surmounted by the flange or disk B, and having underneath said flange or disk the inwardly-projecting annular crease, *e*, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUST H. WIRZ.

Witnesses:

THOMAS D. MOWLDS,
ELLWOOD BONSALE.